

Attorney Docket No. 6413.204-US  
Ebdrup et al.  
Serial No. 10/614,233 Filed July 7, 2003

CLAIM LISTING

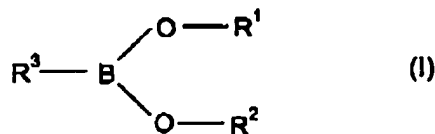
What is claimed is:

1. (Currently amended) A method of:

- a) inhibiting the lipolytic activity of hormone-sensitive lipase against triacylglycerols, diacylglycerols, cholesterol acyl esters or steroid acyl esters; and/or
- b) modulating the plasma level of free fatty acids, glycerol, LDL-cholesterol, HDL-cholesterol, insulin and/or glucose; and/or
- c) modulating intracellular triacylglycerol and cholesterol ester stores, intracellular level of fatty acids, fatty acid esters, diacylglycerols, phosphatidic acids, long chain acyl-CoA's as well as citrate or malonyl-CoA; and/or
- d) increasing insulin sensitivity in adipose tissue, skeletal muscle, liver or pancreatic  $\beta$  cells; and/or
- e) modulating insulin secretion from pancreatic  $\beta$  cells; and/or
- f) inhibiting male fertility

in a patient comprising, administering to a patient in need of such method a therapeutically effective amount of a boronic acid, an ester thereof, a prodrug thereof,

wherein the boronic acid, an ester thereof or a prodrug thereof is of the general formula I



wherein  $\text{R}^1$  and  $\text{R}^2$  are independently selected from hydrogen,  $\text{C}_{1-6}$ -alkyl,  $\text{C}_{2-6}$ -alkenyl,  $\text{C}_{2-6}$ -alkynyl, aryl, heteroaryl,  $\text{C}_{3-8}$ -heterocyclyl and  $\text{C}_{3-10}$ -cycloalkyl, wherein each of  $\text{C}_{1-6}$ -alkyl,  $\text{C}_{2-6}$ -alkenyl,  $\text{C}_{2-6}$ -alkynyl, aryl, heteroaryl,  $\text{C}_{3-8}$ -heterocyclyl and  $\text{C}_{3-10}$ -cycloalkyl is optionally substituted with one or more substituents independently selected from hydroxy, sulfanyl, sulfonyl, sulfinyl, oxo, thiooxo, halogen, amino, imino, cyano, nitro, silyl, boranyl, phosphinyl, selenyl, germyl,  $\text{C}_{1-6}$ -alkyl,  $\text{C}_{2-6}$ -alkenyl,  $\text{C}_{2-6}$ -alkynyl, aryl, heteroaryl,  $\text{C}_{3-8}$ -heterocyclyl and  $\text{C}_{3-10}$ -cycloalkyl, wherein each of hydroxy, sulfanyl, sulfonyl, sulfinyl, amino, imino, silyl, boranyl, phosphinyl, selenyl, germyl,  $\text{C}_{1-6}$ -alkyl,  $\text{C}_{2-6}$ -alkenyl,  $\text{C}_{2-6}$ -

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